

WHAT WE CLAIMED IS:

1. A door lock system for a vehicle comprising:
 - a latch mechanism adapted to a vehicle door and latching the vehicle door to a vehicle body;
 - an open link engagable and disengagable with the latch mechanism;
 - a swing lever connected to the open link;
 - an electric driving source having a gear member; and
 - a rotary gear member arranged between the swing lever and the electric driving source to be meshed with the gear member of the electric driving source, the rotary gear member being directly and engagably connected to the swing lever.
2. A door lock system for a vehicle according to claim 1, wherein the open link is arranged in a same plane as the swing lever.
3. A door lock system for a vehicle according to claim 1, further comprising:
 - a housing accommodating the open link, the swing lever, the electric driving source and the rotary gear member so that the swing lever and the rotary gear member are rotatably supported in the housing.
4. A door lock system for a vehicle according to claim 1, further comprising:
 - an opening lever perpendicularly arranged relative to the open link and rotatably supporting the open link; and
 - an inside lever arranged in parallel with the open link and being engagable with the open link.
5. A door lock system for a vehicle according to claim 1, further comprising:
 - a concave portion formed in the swing lever; and

a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

6. A door lock system for a vehicle according to claim 2, further comprising:
a housing accommodating the open link, the swing lever, the electric driving source and the rotary gear member so that the swing lever and the rotary gear member are rotatably supported in the housing.

7. A door lock system for a vehicle according to claim 2, further comprising:
an opening lever perpendicularly arranged relative to the open link and rotatably supporting the open link; and
an inside lever arranged in parallel with the open link and being engagable with the open link.

8. A door lock system for a vehicle according to claim 3, further comprising:
an opening lever perpendicularly arranged relative to the open link and rotatably supporting the open link; and
an inside lever arranged in parallel with the open link and being engagable with the open link.

9. A door lock system for a vehicle according to claim 6, further comprising:
an opening lever perpendicularly arranged relative to the open link and rotatably supporting the open link; and
an inside lever arranged in parallel with the open link and being engagable with the open link.

10. A door lock system for a vehicle according to claim 2, further comprising:

- a concave portion formed in the swing lever; and
- a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

11. A door lock system for a vehicle according to claim 3, further comprising:

- a concave portion formed in the swing lever; and
- a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

12. A door lock system for a vehicle according to claim 4, further comprising:

- a concave portion formed in the swing lever; and
- a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

13. A door lock system for a vehicle according to claim 6, further comprising:

- a concave portion formed in the swing lever; and
- a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

14. A door lock system for a vehicle according to claim 7, further comprising:

a concave portion formed in the swing lever; and

a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

15. A door lock system for a vehicle according to claim 8, further comprising:

a concave portion formed in the swing lever; and

a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.

16. A door lock system for a vehicle according to claim 9, further comprising:

a concave portion formed in the swing lever; and

a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.